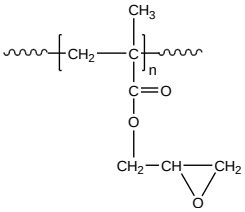
Product Profile

Identification

Product Name: Poly(glycidyl methacrylate)

Product Lot Number: P18494-R-GMA

Product Chemical Architecture:

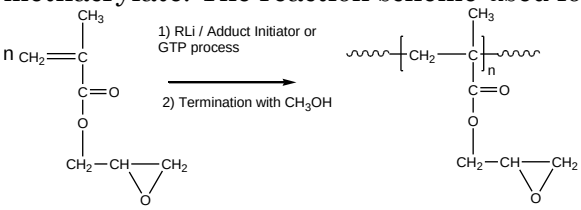


Composition:

Mn (g/mole)	**186,000**
Mw (g/mole)	**225,000**
Mw/Mn	**1.20**
Tg	**72°C**
dn/dc (mL/g)	**0.084 in THF**

Method of Synthesis

Poly(glycidyl methacrylate) is obtained by living anionic /GTP polymerization of glycidyl methacrylate. The reaction scheme used for the polymer synthesis is shown below:



Solubility in different solvents

THF	√	Alcohol	**X**
1,4-dioxane	√	CHCl3	√

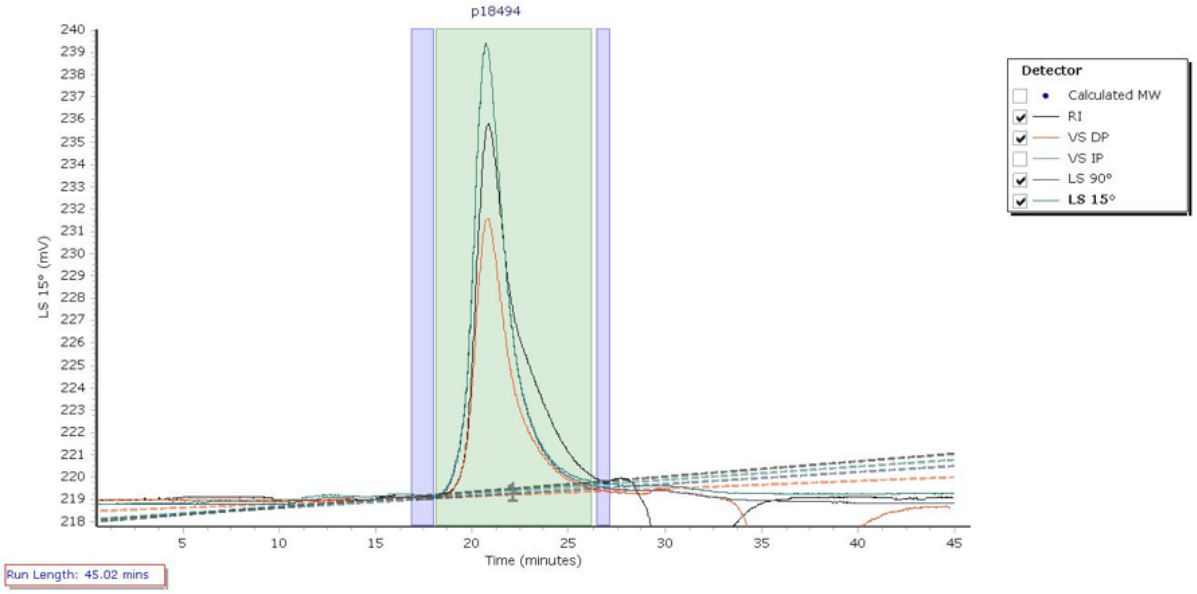
Validation of Architecture

A. **<u>Gel Permeation Chromatography (GPC), SEC- Profile:</u>**

Molecular weights were determined by Agilent Technologie 1260 Infinity II GPC/SEC System equipped with Triple detector (RI, Viscometer, RALS 90o and LS 15o) and three columns (PLgel, 7.5x300 mm, 5µm-10µm, 105-106Å). THF (stabilized BHT) with 1%(v/v%) TEA was the eluent. The flow rate was 1.0 ml/min.

p18494

Chromatogram Plot



Molecular Weight Averages

Peak	Mp (g/mol)	Mn (g/mol)	Mw (g/mol)	Mz (g/mol)	Mz+1 (g/mol)	Mv (g/mol)	PD
Peak 1	275762	186407	225312	256327	280158	250386	1.209

B. DSC thermogram of the polymer: